

## **COMPOSTABLE ORGANIC MATERIALS TRANSFER/PROCESSING OPERATIONS AND FACILITIES**

### **Chapter 3.1 Composting Operations Regulatory Requirements**

#### **Article 1. General**

##### **Section 17850. Authority and Scope.**

(a) This Chapter is adopted pursuant to and for the purpose of implementing the California Integrated Waste Management Act of 1989 (Act) commencing with Section 40000 of the Public Resources Code, as amended. These regulations should be read together with the Act.

(b) This Chapter implements those provisions of the Act relating to composting. Nothing in this Chapter is intended to limit the power of any federal, state, or local agency to enforce any provision of law that it is authorized or required to enforce or administer.

(c) Biological decomposition of organic material can be both a naturally occurring or artificially controlled process. This Chapter establishes standards and regulatory requirements for intentional and inadvertent composting resulting from the storage or handling of compostable organic materials, including but not limited to feedstock, compost, or chipped and ground materials.

(d) Nothing in these standards shall be construed as relieving any owner, operator, or designee from the obligation of obtaining all required permits, licenses, or other clearances and complying with all orders, laws, regulations, or reports, or other requirements of other regulatory or enforcement agencies, including but not limited to, local health entities, regional water quality control boards, air quality management districts or air pollution control districts, local land use authorities, and fire authorities.

(e) Nothing in these standards precludes the enforcement agency or the board from inspecting an activity, operation or facility to verify that it is subject to these standards.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

##### **Section 17852. Definitions.**

For the purposes of this Chapter:

(a) "Active Compost" means compost feedstock that is in the process of being rapidly decomposed and is unstable. Active compost is generating temperatures of at least 50 degrees Celsius (122 degrees Fahrenheit) during decomposition; and/or is releasing carbon dioxide at a rate of at least 15 milligrams per gram of compost per day, or the equivalent of oxygen uptake.

(b) "Additives" means material mixed with feedstock or active compost in order to adjust the moisture level, carbon to nitrogen ratio, or porosity to create a favorable condition. Additives include, but are not limited to, fertilizers and urea. Additives do not include septage, sewage, or compost feedstock.

(c) "Aerated Static Pile" means a composting process that uses an air distribution system to either blow or draw air through the pile. Little or no pile agitation or turning is performed.

(d) "Aerobic Decomposition" means the biological decomposition of organic substances in the presence of oxygen.

(e) "Agricultural Commodities" or "Agricultural Materials" means the products of farms and ranches and items processed from these products by a processor, as defined in Division 21, Part 2, Chapter 1, Section 58619 of the Food and Agricultural Code, including any agricultural, horticultural, aquacultural, silvicultural, floricultural, vermicultural, or viticultural product.

~~—(f) "Agricultural Material Composting Operation" means an operation that processes green and animal materials derived from agricultural commodities, additives, and/or amendments into~~

compost. ~~"Agricultural Material Composting Operation" does not include activities excluded from regulation in Section 17855. "Agricultural Material Composting Operations" include operations that use clean green material, as defined in Subdivision (k) of this Section, if the clean green material portion does not exceed the agricultural commodities portion of active compost on-site annually.~~

(f) "Agricultural Material Transfer/Processing Operation" means an operation that transfers/processes green materials and/or non-green materials derived from agricultural commodities, additives, and/or amendments into compost or chipped and ground material. "Agricultural Material Transfer/Processing Operation" does not include operations that constitute "Green Material Transfer/Processing Operations."

(g) "Amendments" means materials added to stabilized or cured compost to provide attributes for certain compost products, such as product bulk, product nutrient value, product pH, and soils blend. Amendments do not include septage, sewage, or compost feedstock.

(h) "Anaerobic Decomposition" means the biological decomposition of organic substances in the absence of oxygen.

~~(i) "Animal Material" means any material derived from animal products that are for consumption by humans or animals. The sources of these products include, but are not limited to, agriculture, food manufacturing and processing industries, restaurants, hospitals, and food distributors. "Animal Material" is either separated at the point of generation, or separated at a centralized facility that employs methods to minimize contamination. The composting of mammalian flesh, organs, unprocessed hide, blood, bone and marrow is prohibited, except when from the food service industry. Animal material does not include manure.~~

~~(j) "Animal Material Composting Facility" is a facility that processes animal material and additives and amendments into compost. A facility that composts green material in addition to animal material shall be considered an animal material composting facility. "Animal Material Composting Facility" does not include activities excluded from regulation in Section 17855, and operations that constitute "Agricultural Material Composting Operations."~~

(k) "Chipping and Grinding" means an activity that mechanically reduces the size of compostable organic material matter.

~~(l) "Clean Green Material" or "Clean Green" means green material that is processed by a permitted solid waste facility in order to reduce contamination to the greatest extent possible as set forth in Section 17868.4. Tree and landscape trimming materials that have never been combined with other waste materials are considered "Clean Green Materials."~~

(kk) "Compostable Organic Material" means any organic material that when accumulated in sufficient quantities, under optimal conditions will become active compost.

[Optimal conditions to consider include moisture, temperature, and aeration. A broad definition is needed out of practicality. This avoids prescriptive testing requirements to determine if a given material will compost. Staff anticipates that decisions will be made by enforcement agencies based on temperature measurements and their experience with various feedstocks.]

(kkk) "Compostable Organic Materials Transfer/Processing Operation" or "Facility" means an operation or facility that handles compostable organic materials for the purpose of producing compost, as defined in Division 30, Part 1, Chapter 2, Section 40116 of the Public Resources Code. Handling of compostable organic materials results in controlled biological decomposition. Handling includes composting, screening, chipping and grinding, and storage. "Compostable Organic Materials Transfer/Processing Operation or Facility" does not include activities excluded from regulation in Section 17855. "Compostable Organic Materials Transfer/Processing Operation or Facility" includes:

- (1) Agricultural material transfer/processing operations;
- (2) Green material transfer/processing operations and facilities;
- (3) Sewage sludge composting facilities;
- (4) Non-green material transfer/processing facilities;
- (5) Mixed solid waste composting facilities; and
- (6) Research composting operations.

(m) "~~Composting Facility~~" means a facility that is operated for the purpose of producing compost, as defined in Division 30, Part 1, Chapter 2, Section 40116 of the Public Resources Code. A "~~Composting Facility~~" includes:

- ~~–(1) Green material composting facilities that have greater than 1,000 cubic yards of feedstock and active compost on-site at any one time;~~
- ~~–(2) Animal material composting facilities;~~
- ~~–(3) Sewage sludge composting facilities; and~~
- ~~–(4) Mixed solid waste composting facilities.~~

(n) "~~Composting Operation~~" means an operation that is operated for the purpose of producing compost, as defined in Division 30, Part 1, Chapter 2, Section 40116 of the Public Resources Code. A composting operation is a solid waste handling operation that does not constitute a composting facility that would require a solid waste facilities permit. "~~Composting Operation~~" includes:

- ~~–(1) Research operations;~~
- ~~–(2) Agricultural material composting operations; and~~
- ~~–(3) Green material operations that have up to 1,000 cubic yards of feedstock and active compost on-site at any one time.~~

(o) "~~Composting Process~~" means one or a combination of the following processes used to produce a compost product:

- ~~–(1) windrow composting;~~
- ~~–(2) aerated or non-aerated static pile composting;~~
- ~~–(3) enclosed or within vessel composting; and~~
- ~~–(4) other processes approved by the enforcement agency, that meet the requirements set forth in this Chapter.~~

(p) "Curing" means the final stage of the composting process that occurs after compost has undergone pathogen reduction, as described in Section 17868.3, and after most of the readily metabolized material has been decomposed and stabilized.

(q) "Domestic Sewage" means waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

(r) "Dry Weight Basis" means weight calculated on the basis of having been dried until reaching a constant mass, that results in essentially a 100 percent solids content.

(s) "Enclosed Composting Process" means a composting process where the area that is used for the processing, composting, stabilizing, and curing of organic materials, is covered on all exposed sides and rests on a stable surface.

(t) "Feedstock" means any ~~decomposable~~ compostable organic material used in the production of compost or chipped and ground material including, but not limited to, green material, non-green material ~~clean green material, green material, animal material, sewage sludge, and mixed solid waste.~~ Feedstocks shall not be considered as either additives or amendments.

(u) "Green Material" means any plant material that is ~~either separated at the point of generation, or separated at a centralized facility that employs methods to minimize contamination~~ contains no greater than 0.5 percent of physical contaminants by weight, contains no glass or other physical contaminants of a size and shape that can cause injury to humans; and contains no mammalian flesh, organs, unprocessed hide, blood, bone and marrow. Green material includes, but is not limited to, yard trimmings, pre-consumer plant waste, plant wastes from the food processing industry, source-separated plant wastes from the food service industry, manure, untreated wood wastes, paper products, ~~and~~ natural fiber products, and agricultural commodities or agricultural materials. Green material does not include non-green material, sewage sludge, mixed solid waste, material processed from commingled collection, ~~treated wood waste containing lead-based paint or wood preservative,~~ mixed demolition or mixed construction debris.

["Green Material" treated differently than non-green material since it has less physical contaminants and is less likely to have chemical contaminants. Once green material has been commingled with MSW, it becomes MSW because of possible contamination with the following: human pathogens found in disposable diapers, tissues, and household medical wastes;

volatile and semi-volatile organic chemicals; asbestos; metals; and corrosive, caustic, explosive, and sharp materials.]

(uu) "Green Material Transfer/Processing Operation" or "Facility" is an operation or facility that transfers/ processes only green material, additives, and/or amendments. An operation or facility that transfers/processes a feedstock that is not green material shall not be considered a green material transfer/processing operation or facility and is subject to the permitting requirements of the given feedstock. "Green Material Transfer/Processing Operation" or "Facility" does not include activities excluded from regulation in Section 17855.

~~(v) "Green Material Composting Operation" or "Facility" is an operation or facility that processes only green material and additives and amendments into compost. "Green Material Composting Operation or Facility" does not include an "Agricultural Material Composting Operation."~~

(w) "Insulating Material" means material used for the purpose of minimizing the loss of heat from a compost pile undergoing the "Process to Further Reduce Pathogens" (PFRP), as described in Section 17868.3. Insulating material includes, but is not limited to, soil and stabilized compost.

(x) "Manure" means accumulated animal excrement. This definition shall include feces and urine, and any bedding material, spilled feed, or soil that is mixed with feces or urine. ~~If intentionally composted, m~~ Manure is a subset of green material and is regulated as green material, except as provided in Sections 17855 and 17856. Manure that is inadvertently composted, such as may occur at feedlots, dairies, and poultry farms, is not subject to regulation pursuant to this Chapter.

(y) "Mixed Solid Waste" means any material that is part of the municipal solid waste stream, and is mixed with or contains non-organics, processed industrial materials, or plastics. A feedstock that is not source separated and/or contains 10% or more of physical contaminants by weight is mixed solid waste. Compostable organic material that contains mixed demolition or mixed construction debris shall be considered mixed solid waste.

[This figure was chosen as it's already used in the transfer station regulations – industry and enforcement agencies have experience with it. Contaminant levels of 10 percent or greater are indicative of materials that are not source separated or poor collection routes.]

(z) "Mixed Solid Waste Composting Facility" is a facility that processes mixed solid waste into compost. A facility that composts sewage sludge, animal material, or green material, in addition to mixed solid waste, shall be considered a mixed solid waste composting facility.

(zz) "Mushroom Farm" means an activity that produces mushrooms. The storage of feedstock to be used in the production of mushrooms, processing of feedstock into mushroom bedding, and the storage of mushroom bedding prior to it's use as a growth medium is not considered mushroom farming.

(zzz) "Non-Green Material" means any source separated compostable organic material, containing less than 10% physical contaminants, that does not meet the definition of "Green Material," "Sewage Sludge," or "Mixed Solid Waste." Compostable organic material that contains any of the following shall be considered non-green material:

- greater than 0.5 percent physical contaminants by weight,
- glass or other physical contaminants of a size and shape that can cause injury to humans,
- any material derived from animal products that are for consumption by humans or animals,
- or
- post-consumer food scraps.

[“Non-Green Material” treated differently than green material since it has more physical contaminants, is more likely to have higher levels of pathogens, and is likely to have more chemical contaminants.]

(zzzz) "Non-Green Material Composting Facility" is a composting facility that processes only non-green material and additives and amendments into compost. A facility that composts green material, in addition to non-green material shall be considered a non-green material composting facility.

(aa) "Operations Area" means the following areas within the boundary of a ~~composting~~ compostable organic material transfer/processing operation or facility:

- (1) equipment cleaning, maintenance, and storage areas;
- (2) feedstock, active, curing and stabilized compost processing or stockpiling areas; and
- (3) process water and stormwater drainage control systems.

(bb) "Operator" means the owner, or other person who through a lease, franchise agreement or other arrangement with the owner, becomes legally responsible for the following:

- (1) complying with regulatory requirements set forth in this Chapter;
- (2) complying with all applicable federal, state and local requirements;
- (3) the design, construction, and physical operation of the site; and
- (4) site restoration.

(cc) "Owner" means the person or persons who own, in whole or in part, a ~~composting~~ compostable organic material transfer/processing operation or facility, or the land on which a ~~composting process is~~ these operations or facilities are located.

(dd) "Pathogenic Organism" means disease-causing organisms.

(ee) "Process Water" means liquid that is generated during or used in the production of compost or chipped and ground materials.

(ff) "Research Composting Operation" means a composting operation, that is ~~not for profit,~~ and is operated for the purpose of gathering research information on composting.

(gg) "Sewage Sludge" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage and scum or solids removed in primary, secondary, or advanced wastewater treatment processes. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during the preliminary treatment of domestic sewage in a treatment works.

(hh) "Sewage Sludge Composting Facility" is a facility that processes only sewage sludge and additives and amendments into compost product. A facility that composts ~~animal~~ non-green material, or green material, in addition to sewage sludge shall be considered a sewage sludge composting facility.

[Depending on the regulatory tier a non-green facility is placed in, this subsection may need to be revised – e.g., the addition of non-green to sewage sludge could result in the facility being considered a non-green composting facility.]

(ii) "Stabilized Compost" means any organic material that has undergone the Process to Further Reduce Pathogens (PFRP), as described in Section 17868.3, and has reached a stage of reduced biological activity as indicated by reduced temperature and rate of respiration below that of active compost.

(jj) "Static Pile" means a composting process that is similar to the aerated static pile except that the air source may or may not be controlled.

(jjj) "Transfer/Processing" means the handling of compostable organic materials for the purpose of producing compost, as defined in Division 30, Part 1, Chapter 2, Section 40116 of the Public Resources Code. Handling of compostable organic materials results in controlled biological decomposition. Handling includes composting, screening, chipping and grinding, and storage activities related to the production of compost and compost feedstocks.

[Necessary for defining activities subject to these regulations.]

[Make sure does not overlap with "transfer station" regulations – section 17400 et seq.]

(kk) "Vector" includes any insect or other arthropod, rodent, or other animal capable of transmitting the causative agents of human disease.

(ll) "Vermicomposting" means an activity that produces worm castings through worm activity. The enforcement agency may determine whether an activity is or is not vermicomposting. The storage of feedstock to be used in the production of growth medium for worms, feedstock which is being processed to produce growth medium, and the storage of growth medium is not considered vermicomposting.

(mm) "Windrow Composting Process" means the process in which compostable material is placed in elongated piles. The piles or "windrows" are aerated and/or mechanically turned on a periodic basis.

(nn) "Within-vessel Composting Process" means a process in which compostable material is enclosed in a drum, silo, bin, tunnel, reactor, or other container for the purpose of producing compost.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.



## Article 2. Regulatory Tiers for Composting Operations and Facilities

### Section 17855. Excluded Activities.

(a) The activities listed in this Section do not constitute ~~composting operations or facilities~~ compostable organic material transfer/processing operations or facilities for the purposes of this Chapter and are not required to meet the requirements set forth herein. Nothing in this Section precludes the enforcement agency or the board from inspecting an excluded activity to verify that the activity is being conducted in a manner that qualifies as an excluded activity or from taking any appropriate enforcement action.

~~–(1) Residences, parks, community gardens, homeowner associations, universities, schools, hospitals, golf courses, industrial parks, and other similar entities are excluded activities if less than 500 cubic yards of any combination of green material feedstock, animal material feedstock, and active compost is on-site at any one time.~~

~~–(2) (1)~~ An activity is excluded if it composts ~~green material or animal~~ material, derived from agricultural commodities, and returns a similar amount of the compost produced to that same agricultural source, or an agricultural source owned or leased by the owner, parent, or subsidiary of the composting activity. No more than an incidental amount of up to 2,500 cubic yards of compost product may be given away or sold annually.

~~–(3) Chipping and grinding is an excluded activity if 1,000 cubic yards or less of feedstock and chipped and ground material is on-site at any one time or any amount of feedstock and chipped and ground material is stored for 7 days or less.~~

~~–(4) Biomass conversion, as defined in Section 40106 of the Public Resources Code, is an excluded activity.~~

~~–(5) (2)~~ Vermicomposting is an excluded activity. The storage of feedstock to be used in the production of growth medium for worms, feedstock which is being processed to produce growth medium, and the storage of growth medium is not an excluded activity and is subject to the requirements of this chapter section 17862.2.

(3) Mushroom farming is an excluded activity. The storage of feedstock to be used in the production of mushrooms, processing of feedstock into mushroom bedding, and the storage of mushroom bedding prior to its use as a growth medium is not an excluded activity and is subject to the requirements of this chapter. [unless meets 17855(a)(1)]

[Treated same as vermicomposting – excluded once material is used in agricultural production]

~~–(6) (4) Transfer/Processing~~ Storage is an excluded activity if ~~1,000~~ 500 cubic yards or less of any combination of green material or non-green material feedstock, compost, or chipped and ground material is on-site at any one time ~~or any amount of feedstock, compost, or chipped and ground material is stored for 7 days or less.~~

(5) The transfer/processing of compostable organic materials is an excluded activity if:

(a) the operator maintains records which document that material is not stored on-site for more than 48 hours; an alternative storage frequency for agricultural commodities may be approved by the enforcement agency; or

(b) the activity is located at an operation or facility (i.e., landfill or transfer/processing operation or facility) that has a tiered or full permit as defined in Section 18101 and a Report of Facility Information which meets the requirements of Titles 14 or 27 is completed and submitted to the enforcement agency; or

(c) the activity is solely for the temporary storage of sewage sludge at a Publicly Operated Treatment Works (POTW); or

(d) the activity is located at the site of biomass conversion and is for use in biomass conversion as defined in Public Resources Code section 40106; or

(e) the activity is part of a silvicultural operation or a wood, paper, or wood product manufacturing operation.

[Moved from chipping & grinding and storage sections – old 17862.1 and 17862.2]

(6) Storage or handling of bagged compostable organic material is an excluded activity.

(7) ~~Storage or handling of feedstock, compost or chipped and ground materials which have been sold and removed from the site, bagged for sale, given away for beneficial use and removed from the site, or otherwise beneficially used is an excluded activity.~~ Beneficial use of compostable organic materials is an excluded activity. Beneficial use includes, but is not limited to slope stabilization, weed suppression, alternative daily cover, and similar uses, as determined by the enforcement agency; land application in accordance with California Department of Food and Agriculture requirements for a beneficial use as authorized by Food and Agricultural Code section 14501 et seq.; and reclamation projects in accordance with the requirements of the Office of Mine Reclamation of the Department of Conservation as authorized by Public Resources Code section 2770 et seq.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

**Section 17855.2. Prohibitions.**

(a) The composting of mammalian flesh, organs, unprocessed hide, blood, bone and marrow is prohibited, except when from the residential sector or food service industry. Carcasses of animals with any contagious disease shall not be composted, unless approved in writing by the California Department of Food and Agriculture, Division of Animal Industry.

(b) The composting of medical waste is prohibited.

(c) The composting of hazardous waste is prohibited.

[Moved from section 17867(a)(1); (b) and (c) necessary to emphasize that medical and hazardous wastes are prohibited]

[Should the composting and chipping & grinding of wood containing lead-based paint or wood preservative be prohibited if below hazardous levels? Subsection (a) is repetitive of 17867(a)(1)]



[All material on-site would count in determining the tier for the following reasons: material that has undergone pathogen reduction may be contaminated with material that hasn't, it is currently difficult for an enforcement agency to determine which piles count towards the volume used to determine the regulatory tier. Facility designs must consider access and cross-contamination.]

### **Section 17856. Agricultural Material Composting ~~Transfer/Processing~~ Operations.**

~~(a)~~ All agricultural material ~~composting~~ transfer/processing operations shall comply with the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations, except as otherwise provided by this Chapter.

~~(b)~~ (a) Compost or chipped and ground material produced by an agricultural material ~~composting~~ transfer/processing operation which uses only agricultural commodities may be sold or given away without restriction.

(1) Agricultural material ~~composting~~ transfer/processing operations that ~~compost~~ transfer/process only agricultural commodities shall be inspected by the enforcement agency at least once every three (3) months, unless an operator request for a reduced inspection frequency of no less than annually is approved by the enforcement agency. The enforcement agency shall forward a copy of the request and approval to the Board. ~~during periods of active composting.~~

~~(e)~~ (b) Compost produced by an agricultural material ~~composting~~ transfer/processing operation which uses agricultural commodities and/or clean green material, ~~as specified in Section 17852 (k), shall not sell or give-away more than 1,000 cubic yards of compost per year~~ may be sold or given-away in accordance with the following restrictions.

(1) Agricultural material transfer/processing operations that transfer/process agricultural commodities and/or green material, and do not sell or give-away more than 2,500 cubic yards of material per year, shall be inspected by the enforcement agency at least once every three (3) months, unless an operator request for a reduced inspection frequency of no less than annually is approved by the enforcement agency. The enforcement agency shall forward a copy of the request and approval to the Board. No more than 20,000 cubic yards of compostable organic material, other than agricultural commodities, shall be allowed on-site unless the enforcement agency gives prior approval. The enforcement agency shall forward a copy of the approval to the Board.

(2) Agricultural material transfer/processing operations that transfer/process agricultural commodities and green material, and sell or give-away more than 2,500 cubic yards of material per year, shall have no more than 20,000 cubic yards of green material feedstock, compost, and chipped and ground material, excluding agricultural materials, on-site at any one time and shall be inspected by the enforcement agency once every three (3) months.

[Material that is processed and/or used on agricultural land in a beneficial manner causes less concern for public health, safety, and the environment; less public access to these sites, and contamination of agricultural material is less variable.]

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

### **Section 17857. Green Material Transfer/Processing Operations.**

(a) A green material transfer/processing operation that has up to 20,000 cubic yards of feedstock, compost, and chipped and ground material processed from it on-site at any one time shall comply with the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations.

(b) A green material transfer/processing operation that has up to 20,000 cubic yards of feedstock, compost, and chipped and ground material on-site at any one time shall be

inspected by the enforcement agency at least once every three (3) months, unless an operator request for a reduced inspection frequency of no less than annually is approved by the enforcement agency. The enforcement agency shall forward a copy of the request and approval to the Board.

- (c) A green material transfer/processing facility that has more than 20,000 cubic yards of feedstock, compost, and chipped and ground material on-site at any one time shall, if required by the enforcement agency, obtain a Full Solid Waste Facilities Permit pursuant to the requirements of Title 27, California Code of Regulations, Subchapter 1 and Subchapter 3, Articles 1, 2, 3, and 3.1 (21450 et seq.) prior to commencing operations. The enforcement agency may allow a facility that has more than 20,000 cubic yards of green material feedstock, compost, and chipped and ground material on-site at any one time to obtain a Registration Permit pursuant to the requirements of title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations, prior to commencing operations.

[Higher volume of green material allowed in EA Notification and Registration tiers; Standardized no longer required for green material; justified because green material is now basically equivalent to “clean green”, less contamination (physical and chemical) than other feedstocks.]

[May need to develop criteria under which a facility that has more than 20,000 cubic yards on-site could be allowed to obtain a Registration permit instead of a Full SWFP (“downtier”). Once “downtiered,” would return to Full SWFP if criteria were no longer met.]

#### **~~Section 17857. — Green Material Composting Operations and Facilities.~~**

- ~~—(a) A green material composting operation that has up to 1,000 cubic yards of feedstock and active compost on-site at any one time shall comply with the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations.~~
- ~~—(b) A green material composting facility that has more than 1,000 cubic yards, but no more than 10,000 cubic yards of feedstock and active compost on-site at any one time shall obtain a Registration Permit pursuant to the requirements of Title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations, prior to commencing operations.~~
- ~~—(c) A green material composting facility that has more than 10,000 cubic yards of feedstock and active compost on-site at any one time shall obtain a Standardized Composting Permit (see Appendix A, form CIWMB-5000, which is incorporated herein by reference), pursuant to the requirements of Title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations, prior to commencing operations.~~

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

#### **~~Section 17858. — Animal Material Composting Facilities.~~**

- ~~—(a) An animal material composting facility that has up to 10,000 cubic yards of feedstock and active compost on-site at any one time shall obtain a Registration Permit pursuant to the requirements of Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations, prior to commencing operations.~~
- ~~—(b) An animal material composting facility that has more than 10,000 cubic yards of feedstock and active compost on-site at any one time shall obtain a Standardized Composting Permit (see Appendix A, form CIWMB-5000, which is incorporated herein by reference), pursuant to the requirements of Title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations, prior to commencing operations.~~

~~NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.~~  
~~Reference: Sections 43020 and 43021 of the Public Resources Code.~~

**Section 17859. Sewage Sludge Composting Facilities.**

(a) A sewage sludge composting facility that has up to 10,000 cubic yards of feedstock, which meets Class B requirements, pursuant to Title 40, Chapter I, Subchapter O, Part 503.32 of the Code of Federal Regulations, and ~~active~~ compost on-site at any one time shall obtain a Registration Permit pursuant to the requirements of Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations, prior to commencing operations.

(1) The operator shall obtain records demonstrating that the sewage sludge feedstock is in compliance with Class B requirements described above.

(b) A sewage sludge composting facility that composts sewage sludge feedstock which does not meet Class B requirements, or has more than 10,000 cubic yards of feedstock, and ~~active~~ compost on-site at any one time shall obtain a Standardized Composting Permit (see Appendix A, form CIWMB 5000, which is incorporated herein by reference), pursuant to the requirements of Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations, prior to commencing operations.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.

Title 40, Chapter I, Subchapter O, Part 503, of the Code of Federal Regulations.

**Section 17859.5. Non-Green Material Transfer/Processing Facilities.**

(a) A non-green material transfer/processing facility that has up to 10,000 cubic yards of feedstock, compost, and chipped and ground material on-site at any one time shall obtain a Registration Permit pursuant to the requirements of Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations, prior to commencing operations.

(b) A non-green material transfer/processing facility that has more than 10,000 cubic yards of feedstock, compost, and chipped and ground material on-site at any one time shall, if required by the enforcement agency, obtain a Full Solid Waste Facilities Permit pursuant to the requirements of Title 27, California Code of Regulations, Subchapter 1 and Subchapter 3, Articles 1, 2, 3, and 3.1 (21450 et seq.) prior to commencing operations. The enforcement agency may allow a facility that has more than 10,000 cubic yards of non-green feedstock, compost, and chipped and ground material on-site at any one time to obtain a Registration Permit pursuant to the requirements of title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations, prior to commencing operations.

[Full permit required due to nature of feedstock. Non-green material has more physical contaminants than green material and is more likely to have more chemical contaminants. A higher level of physical contaminants may be indicative of less control over feedstock sources.]

**Section 17860. Mixed Solid Waste Composting Facilities.**

Mixed solid waste composting facilities shall obtain a Full Solid Waste Facilities Permit pursuant to the requirements of ~~Article 3.1 of Chapter 5 of this Division (Section 18200 et seq.)~~ Title 27, California Code of Regulations, Subchapter 1 and Subchapter 3, Articles 1, 2, 3, and 3.1 (21450 et seq.) prior to commencing operations.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.

**Section 17862. Research Composting Operations.**

(a) An operator conducting research composting operations shall not have more than ~~2,500~~ **5,000** cubic-yards of compost feedstock and ~~active~~ compost on-site at any one time, and shall comply with the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations, except as otherwise provided by this Chapter.

(b) In addition to the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0, Section 18103.1 (a)(3), the operator shall provide a description of the research to be performed and the projected timeframe for completion of the research operation.

(c) The Enforcement Agency Notification for a research composting operation shall be renewed after each two year period of operation.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

[No violations of state minimum standards during 1999. Board staff have received comments that volume was limiting innovation.]

**Section 17862.1. ~~Chipping and Grinding.~~**

- ~~–(a) A chipping and grinding activity that has more than 1,000 cubic yards of feedstock and chipped and ground material on-site at any one time shall comply with Sections 17867(a)(2), 17867(b)(1), and 17869(d).~~
- ~~–(b) A chipping and grinding activity shall not be subject to the requirements of Subdivision (a) of this Section if:~~
  - ~~–(1) The operator maintains records which document that material is not stored on-site for more than 7 days; or,~~
  - ~~–(2) The activity is located on agricultural land for the production of chipped and ground material from animal material or agricultural commodities which shall be applied to agricultural lands owned or leased by the owner, parent, or subsidiary of the agricultural material chipping and grinding activity; or,~~
  - ~~–(3) The activity is located at an operation or facility that has a tiered or full permit as defined in Section 18101, and the activity is identified and described in the Report of Facility Information; or,~~
  - ~~–(4) The activity is located at the site of biomass conversion and is for use in biomass conversion as defined in Public Resources Code section 40106.~~
  - ~~–(5) The activity is part of a silvicultural operation or a wood, paper, or wood product manufacturing operation.~~
- ~~–(c) Nothing in this section precludes the enforcement agency or the board from the following: inspecting an activity to verify that it is conducted in a manner that is subject to subdivision (b) of this section; inspecting an activity to verify that the operation is in compliance with the standards set forth in subdivision (a) of this section; or, from taking any appropriate enforcement action, including the use of a Notice and Order as provided in Section 18304.~~

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

**Section 17862.2. ~~Storage.~~**

- ~~–(a) The storage of more than 1,000 cubic yards of feedstock, compost, or chipped and ground material on-site, shall comply with Sections 17867(a)(2), 17867(b)(1), and 17869(d), unless explicitly excluded pursuant to Section 17855 of this Chapter.~~
- ~~–(b) A storage activity shall not be subject to the requirements of Subdivision (a) of this Section if:~~
  - ~~–(1) The operator maintains records which document that material is not stored on-site for more than 7 days; or,~~
  - ~~–(2) The activity is located on agricultural land and stores animal material or agricultural commodities which shall be applied to agricultural lands owned or leased by the owner, parent, or subsidiary of the agricultural material storage activity; or,~~
  - ~~–(3) The activity is located at an operation or facility that has a tiered or full permit as defined in Section 18101, and the activity is identified and described in the Report of Facility Information; or,~~
  - ~~–(4) The activity is located at the site of biomass conversion and is for use in biomass conversion as defined in Public Resources Code section 40106; or~~
  - ~~–(5) The activity is solely for the storage of sewage sludge at a Publicly Operated Treatment Works (POTW).~~
  - ~~–(6) The activity is part of a silvicultural operation or a wood, paper, or wood product manufacturing operation.~~
- ~~–(c) Composting to solely produce growth medium for worms is subject to this section but is not subject to the permitting requirements of this Chapter.~~
- ~~–(d) Nothing in this section precludes the enforcement agency or the board from the following: inspecting an activity to verify that it is conducted in a manner that is subject to subdivision (b) of~~



~~this section; inspecting an activity to verify that the operation is in compliance with the standards set forth in subdivision (a) of this section; or, from taking any appropriate enforcement action, including the use of a Notice and Order as provided in Section 18304.~~

~~NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.~~

**Article 3. Report of Facility Information****Section 17863. Report of Composting Site Information.**

Each operator of a ~~composting~~ compostable organic material transfer/processing facility that is required to obtain a Registration, Standardized or Full Solid Waste Facilities Permit, as specified in Article 2 of this Chapter, shall, at the time of application, file a Report of Composting Site Information with the enforcement agency. If the operator intends to alter the permitted feedstock, these changes must be reported to the enforcement agency for maintenance of permit status. Such changes may become the basis for revisions to the permit or for revocation of the permit. A Report of Composting Site Information shall contain the following:

- (a) A description of the ~~composting~~ processes to be used, including estimated quantities of feedstocks, additives, and amendments.
- (b) A descriptive statement of the operations conducted at the facility.
- (c) A schematic drawing of the facility showing layout and general dimensions of all processes utilized in the production of compost including, but not limited to, unloading, storage, processing, parking, and loading areas.
- (d) A description of the proposed methods used to control litter, odors, dust, rodents, and insects.
- (e) A description of the proposed emergency provisions for equipment breakdown or power failure.
- (f) A description of the storage capacity and anticipated maximum and average length of time ~~compost~~ compostable organic materials will be stored at the facility.
- (g) A description of ~~compost~~ compostable organic materials transfer/processing equipment used at the facility including type, capacity, and number of units.
- (h) Anticipated annual operation capacity for the facility in cubic-yards.
- (i) A description of provisions to handle unusual peak loadings.
- (j) A description of the proposed method for storage and final disposal of nonrecoverable or nonmarketable residues.
- (k) A description of the water supplies for process water required.
- (l) Identification of person(s) responsible for oversight of facility operations.
- (m) A description of the proposed site restoration activities, in accordance with Section 17870 of this Chapter.

(n) An Odor Impact Minimization Plan pursuant to Section 17863.4.

Authority cited: Sections 40502, 43020 and 43021 of the Public Resources Code

Reference: Sections 43020 and 43021 of the Public Resources Code.

**Section 17863.2. Processing Report of Composting Site Information (RCSI)**  
**Amendments for Facilities Subject to a Standardized Permit**

- (a) The applicant shall submit an RCSI amendment and application package pursuant to 27 CCR 21570 or section 17863. The submittal shall contain only those items in 27 CCR 21570(f), or section 18105.1, that have changed, are proposed for change or as otherwise specified by the EA.
- (b) The EA shall review the applicant's amendments to the RCSI and determine if such amendments or lack thereof are the basis for changes in the permit.
- (c) The EA may approve and file the amendment to the RCSI without revising the permit if all of the following criteria are met:

- (1) the proposed change is consistent with all applicable certified and/or adopted CEQA documents, or has been determined by the EA that the change would not create any adverse environmental impacts and is exempt from the requirements of CEQA;
- (2) the EA has deemed the proposed change acceptable and consistent with, but not limited to, state minimum standards pursuant to this subchapter; and
- (3) the changes do not conflict with the terms and conditions in the current SWFP. The EA shall determine if the RCSI amendments meet the requirements of ¶(c) within 30 days of receipt.
- (d) Within 5 days of acceptance for filing of the RCSI amendment and application package, the EA shall notify the operator, the CIWMB and the RWQCB of their determination. The EA shall include in their notification to the CIWMB, a copy of the amended RCSI, and a copy of the application form along with the EA determination specified in ¶(d).

In cases where amendments do not follow the criteria set in this section, the EA may either require the operator to revise the SWFP application pursuant to 27 CCR 21570, section 18105.1, or deny the proposed amendment, in which case the applicant shall have (30) days within which to appeal the decision to the hearing panel.

#### **Section 17863.4. Odor Impact Minimization Plan.**

- (a) All compostable organic material handling operations and facilities shall prepare and maintain a site-specific odor impact minimization plan. A complete plan shall be submitted to the enforcement agency with the Enforcement Agency Notification or permit application.
- (b) Odor impact minimization plans shall provide guidance to on-site operation personnel by describing, at a minimum, the following items. If the operator will not be implementing any of these procedures, the plan shall explain why it is not necessary.
  - (1) an odor monitoring protocol which describes the proximity of possible odor receptors and a method for assessing odor impacts at the locations of the possible odor receptors; and,
  - (2) a description of meteorologic conditions effecting migration of odors and/or transport of odor-causing material off-site. Seasonal variations that effect wind velocity and direction shall also be described; and,
  - (3) a complaint response protocol; and,
  - (4) a description of operating and design procedures for minimizing odor, including aeration, moisture management, feedstock quality, drainage controls, pad maintenance, wastewater pond controls, storage practices (e.g., storage time and pile geometry), contingency plans (i.e., equipment, water, power, and personnel), weather impacts, biofiltration, and tarping.
- (c) The odor impact minimization plan shall be revised to reflect any changes, and a copy shall be provided to the enforcement agency, within 30 days of those changes.
- (d) The odor impact minimization plans shall be reviewed annually by the operator to determine if any regions are necessary.
- (e) The odor impact minimization plan shall be used by the enforcement agency to determine whether or not the operation or facility is following the procedures established by the operator. If the enforcement agency determines that the odor impact minimization plan is not being followed, the enforcement agency may issue a Notice and Order (pursuant to section 18304) to require the operator to either comply with the odor impact minimization plan or to revise it.

(f) If the odor impact minimization plan is being followed, but odor impacts are still occurring, the enforcement agency may issue a Notice and Order (pursuant to section 18304) requiring the operator to take additional measures to minimize odors.

(g) The requirement to minimize odors means that the operator must take all reasonable and feasible measures to attempt to reduce or eliminate odors, but does not mean that all odors must be completely eliminated.

[Should the EA be allowed to waive the Odor Impact Minimization Plan for agricultural operations that only compost agricultural commodities?]

#### **Article 4.                      Standardized Composting Permit Terms and Conditions.**

##### **Section 17864.                      General Terms and Conditions.**

The enforcement agency shall include no other terms and conditions than those contained in form CIWMB 5000 "Standardized Composting Permit" (revised 2/95), which is incorporated herein by reference. (See Appendix A.)

Authority cited: Sections 40502, 43020 and 43021 of the Public Resources Code

Reference: Sections 43020 and 43021 of the Public Resources Code.

**Article 5. Composting Operation and Facility Siting and Design Standards****Section 17865. Siting On Landfills.**

(a) ~~Composting~~ Compostable organic materials transfer/processing operations and facilities located atop closed solid waste landfills shall meet postclosure land use requirements pursuant to Title 27, Division 2, Subdivision 1, Chapter 3, Subchapter 5, Article 2, Section 21190 ~~14, Division 7, Chapter 3, Article 7.8, Section 17796~~ of the California Code of Regulations.

(b) ~~Composting~~ Compostable organic materials transfer/processing operations and facilities sited on intermediate cover on a solid waste landfill shall locate operations areas on foundation substrate that is stabilized, either by natural or mechanical compaction, to minimize differential settlement, ponding, soil liquefaction, or failure of pads or structural foundations.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

**Section 17866. General Design Requirements.**

(a) ~~Composting~~ Compostable organic materials transfer/processing operations and facilities shall be designed and constructed in such a manner as to enable the operations and facilities to comply with the operational requirements set forth in Article 6 of this Chapter.

(b) The design of a ~~composting~~ compostable organic materials transfer/processing facility shall utilize advice, as appropriate, from persons competent in engineering architecture, landscape design, traffic engineering, air quality control, and design of structures.

(1) The engineering design of a ~~composting~~ compostable organic materials transfer/processing facility shall be in accordance with the principles and disciplines in the State of California generally accepted for design of this type of facility. The design of a composting facility requiring a Standardized or Full Permit shall accompany the Report of Composting Site Information, pursuant to Section 17863 of this Chapter.

(2) The engineering design shall be based on appropriate data regarding the service area, anticipated nature and quantity of material to be received, climatological factors, physical settings, adjacent land use (existing and planned), types and numbers of vehicles anticipated to enter the station, drainage control, the hours of operation and other pertinent information. If the station is to be used by the general public, the design of the facility shall take account of features that may be needed to accommodate such public use.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

## Article 6. Composting Operating Standards

### Section 17867. General Operating Standards.

(a) All ~~composting~~ compostable organic materials transfer/processing operations and facilities shall meet the following requirements:

(1) The composting of mammalian flesh, organs, unprocessed hide, blood, bone, and marrow is prohibited, except when from the residential sector or food service industry. Carcasses of animals with any contagious disease shall not be composted, unless approved in writing by the California Department of Food and Agriculture, Division of Animal Industry.

(2) All composting, storage and handling activities shall be conducted in a manner that minimizes vectors, odor impacts, litter, hazards, nuisances, and noise impacts; and minimizes human contact with, inhalation, ingestion, and transportation of dust, particulates, and pathogenic organisms.

(3) Random load checks of feedstocks, additives, and amendments for contaminants shall be conducted.

(4) Contamination of ~~compost~~ compostable organic material that has undergone pathogen reduction, pursuant to Section 17868.3 of this Chapter, with feedstocks, compost, or wastes that have not undergone pathogen reduction, pursuant to Section 17868.3 of this Chapter, or additives shall be prevented.

(5) Unauthorized human or animal access to the facility shall be prevented.

(6) Traffic flow into, on, and out of the composting operation or facility shall be controlled in a safe manner.

(7) All ~~composting~~ compostable organic materials transfer/processing operations and facilities, that are open for public business, shall post legible signs at all public entrances. These signs shall include the following information:

(A) name of the operation or facility,

(B) name of the operator,

(C) facility hours of operation,

(D) materials that will and will not be accepted, if applicable,

(E) schedule of charges, if applicable, and

(F) phone number where operator or designee can be reached in case of an emergency.

~~(b) All composting facilities shall meet the following requirements:~~

~~(1)~~

(8) The operator shall provide fire prevention, protection and control measures, including, but not limited to, temperature monitoring of windrows and piles, adequate water supply for fire suppression, and the isolation of potential ignition sources from combustible materials. A firelane of a minimum of 12 feet in width, shall be provided to allow access to all operation areas.

(or "The operator shall provide adequate fire prevention, protection and control measures as required by the local fire authority.")

(9) The operator shall provide telephone or radio communication capability for emergency purposes.

(10) Refuse removed from feedstock, compost, or chipped and ground material shall be removed from the site within 7 days and transported to an appropriate facility.

(11) Enclosed operations and facilities shall provide adequate ventilation to prevent adverse public health effects from decomposition gases.

(12) The operator shall ensure that leachate is controlled to prevent contact with the public.

(13) The operator shall prevent or remove physical contaminants in compost that may cause injury to humans.

(14) An attendant shall be on duty if the operation or facility is open to the public.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.



## Article 7. Environmental Health Standards

### Section 17868.1. Sampling Requirements.

All composting, and green material transfer/processing operations that sell or give away greater than 2,500 cubic yards of compost annually, and all facilities shall meet the following requirements:

(a) Operators shall verify that compost meets the maximum acceptable metal concentration limits specified in Section 17868.2, and pathogen reduction requirements specified in Section 17868.3. Verification of pathogen reduction requirements shall occur as close as possible to the point at which compost is sold and removed from the site, bagged for sale, given away for beneficial use and removed from the site or otherwise beneficially used. This verification shall be performed by taking and analyzing at least one composite sample of compost, following the requirements of this Section as follows:

(1) An operator who composts green material, ~~animal material, or~~ non-green material, or mixed solid waste shall take and analyze one composite sample for every 5,000 cubic-yards of compost produced.

(2) An operator who composts sewage sludge shall meet the sampling schedule described in Table 1 below.

<b>Table 1 – Frequencies of Compost Sampling for Sewage Sludge Composting Facilities</b>	
<b>Amount of Sewage Sludge Compost Feedstock (metric tons/365 day period)</b>	<b>Frequency</b>
Greater than zero but fewer than 290	Annually
Equal to or greater than 290 but fewer than 1,500	Quarterly
Equal to or greater than 1,500 but fewer than 15,000	Bimonthly
Equal to or greater than 15,000	Monthly

(A) The amount of sewage sludge compost feedstock shall be calculated in dry weight metric tons.

(3) Composite sample analysis for maximum acceptable metal concentrations, specified in Section 17868.2, shall be conducted at a laboratory certified by the California Department of Health Services, pursuant to the Health and Safety Code.

(b) A composite sample shall be representative and random, and may be obtained by taking ~~consist of~~ twelve (12) mixed samples as described below.

(1) The twelve samples shall be of equal volume.

(2) The twelve samples shall be extracted from within the compost pile as follows:

(A) Four samples from one-half the ~~horizontal~~ width of the pile, each at a different cross-section;

(B) Four samples from one-fourth the ~~horizontal~~ width of the pile, each at a different cross-section; and,

(B) Four samples from one-eighth the ~~horizontal~~ width of the pile, each at a different cross-section.

(c) The enforcement agency may approve alternative methods of sampling for a green material transfer/processing operation or facility that ensures the maximum metal concentration

requirements of section 17868.2 and the pathogen reduction requirements of section 17868.3 are met.

[Guidance on representative and random sampling will be provided at a later date.]

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.

**Section 17868.2. Maximum Metal Concentrations.**

~~Compost~~ (a) Products derived from compostable organic materials, that contains any metal in amounts that exceed the maximum acceptable metal concentrations shown in Table 2 shall be designated for disposal, additional processing, or other use as approved by state or federal agencies having appropriate jurisdiction.

<b>Table 2 – Maximum Acceptable Metal Concentrations</b>	
<b>Constituent</b>	<b>Concentration (mg/kg) on dry weight basis</b>
Arsenic (As)	41
Cadmium (Cd)	39
Chromium (Cr)	1200
Copper (Cu)	1500
Lead (Pb)	300
Mercury (Hg)	17
Nickel (Ni)	420
Selenium (Se)	36
Zinc (Zn)	2800

(b) Alternative methods of compliance to meet the requirements of Subdivision (a) of this Section, including but not limited to sampling frequencies, may be approved by the enforcement agency for green material transfer/processing operations and facilities if the enforcement agency determines that the alternative method will ensure that the maximum acceptable metal concentrations shown in Table 2 are not exceeded.

[Literature and data collected since implementation of this standard indicates that the maximum acceptable metals concentrations are rarely exceeded in compost derived from green materials.]

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.  
Reference: Sections 43020 and 43021 of the Public Resources Code.

**Section 17868.3. Pathogen Reduction.**

(a) ~~Compost~~ Products derived from compostable organic materials, that contains pathogens in amounts that exceed the maximum acceptable pathogen concentrations described in Subdivision (b) of this Section shall be designated for disposal, additional processing, or other use as approved by state or federal agencies having appropriate jurisdiction.

(b) Operators that produce compost shall ensure that:

(1) The density of fecal coliform in compost, that is or has at one time been active compost, shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in compost shall be less than three (3) Most Probable Number per four (4) grams of total solids (dry weight basis).

(2) At enclosed or within-vessel compost operations and facilities, active compost shall be maintained at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 3 days.

(A) Due to variations among enclosed and within-vessel composting system designs, including tunnels, the operator shall submit a system-specific temperature monitoring plan with the permit application to meet the requirements of Subdivision (b)(2) of this Section.

(3) If the operation or facility uses a windrow composting process, active compost shall be maintained under aerobic conditions at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 15 days or longer. During the period when the compost is maintained at 55 degrees Celsius or higher, there shall be a minimum of five (5) turnings of the windrow. The compost shall be maintained at 55 degrees Celsius or higher for a minimum of 3 consecutive days between turnings. [Clarifies that 15 consecutive days of temperatures above 131 degrees Fahrenheit is not required; five turnings are required to ensure that all of the material is likely to be in a zone that achieves 131 degrees Fahrenheit – once turned, this temperature must be achieved for 3 consecutive days.]

(4) If the operation or facility uses an aerated static pile composting process, all active compost shall be covered with 6 to 12 inches of insulating material, and the active compost shall be maintained at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 3 days.

(c) Alternative methods of compliance to meet the requirements of Subdivision (b) of this Section may be approved by the enforcement agency if the enforcement agency determines that the alternative method will provide equivalent pathogen reduction.

(d) Compost operations and facilities shall be monitored as follows to ensure that the standards in Subdivision (b) of this Section are met:

(1) Each day during the pathogen reduction period, at least one temperature reading shall be taken per every 150 feet of windrow, or fraction thereof, or for every 200 cubic-yards of active compost, or fraction thereof.

(2) Temperature measurements for pathogen reduction shall be measured as follows:

(A) Windrow composting processes and agitated bays shall be monitored twelve (12) to twenty-four (24) inches below the pile surface;

(B) Aerated static pile composting processes shall be monitored twelve (12) to eighteen (18) inches from the point where the insulation cover meets the active compost.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.

**~~Section 17868.4 Clean Green Material Processing Requirements.~~**

~~In order for a feedstock to be considered clean green material, as defined in Section 17852(1), the following requirements shall be met:~~

- ~~–(a) The feedstock shall undergo load checking to ensure a reduction in physical contaminants to the greatest extent possible, but no greater than 0.5 percent of total weight, which includes both visual observation of incoming waste loads, and load sorting to quantify percentage of contaminating materials.~~
- ~~–(1) Load sorting shall be performed on a minimum of one percent of daily incoming material volume and number of vehicle loads, or at least one truck per day, whichever is greater.~~
- ~~–(b) The feedstock shall meet the metal concentration limits specified in Table 2 of Section 17868.2.~~
- ~~–(c) Facility personnel shall be adequately trained to perform the activities specified in this section.~~
- ~~–(d) Any agricultural material composting operation using this feedstock shall obtain records demonstrating compliance with this Section.~~

~~NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.~~

~~Reference: Sections 43020 and 43021 of the Public Resources Code.~~

**Section 17868.5. Determination of Percentage of Physical Contaminants.**

Upon request of the enforcement agency, the operator shall provide data supporting contaminant levels for the applicable permit tier.

[The percentage of physical contaminants determines the classification of a given feedstock (i.e., < 0.5% physical contaminants for green material, > 0.5% <10% for non-green material, or ≥ 10% for mixed solid waste.]

**Article 8. Composting Operation and Facility Records****Section 17869. General Record Keeping Requirements.**

All composting, and compostable organic materials transfer/processing operations and facilities shall meet the following requirements:

(a) All records required by this Chapter shall be kept in one location and accessible for five (5) years and shall be available for inspection by authorized representatives of the board, enforcement agency, local health entity, and other duly authorized regulatory and enforcement agencies during normal working hours.

(b) The operator shall record any special occurrences encountered during operation and methods used to resolve problems arising from these events, including details of all incidents that required implementing emergency procedures.

(c) The operator shall record any public complaints received by the operator, including:

(1) the nature of the complaint,  
(2) the date the complaint was received,  
(3) if available, the name, address, and telephone number of the person or persons making the complaint, and

(4) any actions taken to respond to the complaint.

(d) The operator shall record the quantity and type of feedstock received and quantity of compost and chipped and ground material produced.

(e) The operator shall record the number of load checks performed and loads rejected.

(f) The operator shall record all test results generated by compliance with Article 7 of this Chapter, including but not limited to, metal concentrations, fecal coliform and *Salmonella* sp. densities, temperature measurements, and dates of windrow turnings.

(1) The operator shall retain records detailing pathogen reduction methods.

(g) The operator shall record and retain records of any serious injury to the public occurring on-site and any complaint of adverse health effects to the public attributed to operations. Serious injury means any injury that requires inpatient hospitalization for a period in excess of 24 hours or in which a member of the public suffers a loss of any member of the body or suffers any degree of permanent disfigurement.

[Data needed to confirm that state minimum standards adequately protect public health and safety. Definition of serious injury based on Cal/OSHA definition – Title 8, Section 330.]

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.



**Article 9. Composting Facility Site Restoration****Section 17870. Site Restoration.**

All composting facilities and compostable organic materials transfer/processing operations ~~and facilities~~ shall meet the following requirements:

(a) The operator shall provide the enforcement agency written notice of intent to perform site restoration, at least 30 days prior to beginning site restoration.

(b) The operator(s) and owner(s) shall provide site restoration necessary to protect public health, safety, and the environment.

(c) The operator shall ensure that the following site restoration procedures are performed upon completion of operations and termination of service:

(1) The operation and facility grounds, ponds, and drainage areas shall be cleaned of all residues including, but not limited to, compost materials, construction scraps, and other materials related to the operations, and these residues legally recycled, reused, or disposed of.

(2) All machinery shall be cleaned and removed or stored securely.

(3) All remaining structures shall be cleaned of compost materials, dust, particulates, or other residues related to the composting and site restoration operations.

NOTE: Authority cited: Sections 40502, 43020, and 43021 of the Public Resources Code.

Reference: Sections 43020 and 43021 of the Public Resources Code.